IN THE CLAIMS:

Claims 1-14 (cancel)

Claim 15 (New): A method of coding an image, comprising:

coding a foreground image;

coding a background image as a plurality of image coefficients;

canceling any image coefficients associated with spatial areas occupied by the foreground

image;

reconstructing image data in a background image area and in the foreground image area

based on the remaining coefficients;

correcting the image data in the background image area;

coding the corrected reconstructed image data as a second plurality of image coefficients;

canceling any second image coefficients associated with spatial areas occupied by the

foreground image area; and

including remaining second image coefficients in an output data signal.

Claim 16 (New): The method of claim 15, further comprising, prior to the including step,

correcting the remaining second image coefficients according to the background image data.

Claim 17 (New): A method of coding data of an image having a foreground image area and

a background image area, comprising:

coding the data by wavelet decomposition,

canceling a selected wavelet coefficient,

generating reconstructed image data for the foreground image area and the background

image area from the remaining wavelets,

correcting the reconstructed image data in the foreground image area, and

coding the corrected reconstructed image data by wavelet decomposition.

Claim 18 (new): A method of coding data of an image, the image having a foreground image area and a background image area, comprising:

coding the data as coefficient data,

canceling a selected coefficient,

reconstructing an image in the foreground image area and in the background image area from the remaining coefficients,

correcting the reconstructed image data only in the foreground image area, and

coding the corrected reconstructed image data as coefficient data.

Claim 19 (new): A method for coding image data, comprising:

coding an image as coefficient data,

reconstructing image data in a foreground image area and a background image area from the coefficient data,

correcting the reconstructed image data in the foreground image area without regard to the reconstructed image data in the background image area,

coding the corrected reconstructed image data as second coefficient data, and

outputting the second coefficient data.

Claim 20 (new): A method for coding a data signal representing partially-masked image data, comprising:

generating coefficients representing spatial areas of the image data,

canceling coefficients of masked image data,

reconstructing image data based on coefficients of non-masked image data,

for any portion of the reconstructed image data that lies outside of the mask, substituting the original image data therefor, and

repeating the generating, canceling, reconstructing and substituting steps at least once unless convergence is reached; and

outputting the coefficients as the coded image data.

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Claim 21 (new): A method for coding a data signal representing partially-masked image data, comprising:

coding the image data as transform coefficients in a plurality of stages, performed from a finest scale to a coarsest scale, the coding for at least one stage comprising:

filtering the image data at a resolution corresponding to the scale of the instant stage,

generating transform coefficients representative of the filtered image data, the transform coefficients associated with the scale of the instant stage,

canceling transform coefficients associated with image data located below a mask,

reconstructing image data based on the remaining coefficients,

for any portion of the reconstructed image data located outside of the mask, substituting original image data therefor, and

repeating the generating and canceling steps at least once unless the reconstructed image data converges to the original image data outside of the mask; and

outputting the unaltered transform coefficients from each stage as the coded data signal.

Claim 22 (new): The method of claim 21, wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.

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Claim 23 (new) A method of coding a data signal representing partially-masked image data, comprising:

initializing reconstructed image data to the image data; and

for at least one iteration:

generating transform coefficients representative of the reconstructed image data,

identifying transform coefficients associated with image data below the mask,

for each identified transform coefficient w, modifying the coefficient by $w' = w(1 - \gamma)$, where γ is an overshoot factor having a value from 0 to 2,

reconstructing image data from the modified transform coefficients and the unaltered transform coefficients, and

for any portion of the reconstructed image data x'_i that differs from a corresponding portion of the image data x_i, setting the reconstructed image data to $x'_i = (1 + \gamma) x_i$.

Claim 24 (new): The coded data signal of claim 23, wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.

Claim 25 (new): The coded data signal of claim 23, wherein $\gamma = 1.5$.

Claim 26 (new): A method of coding a data signal representing partially-masked image data converging on a predetermined accuracy after a number of iterations proportional to a number of masked pixels, comprising:

generating coefficients representing spatial areas of the image data;

canceling coefficients of masked image data, reconstructing image data based on coefficients of non-masked image data;

for any portion of the reconstructed image data that lies outside of the mask, substituting the original image data therefore;

repeating the generating, canceling, reconstructing and substituting steps at least once unless convergence is reached; and

outputting the coefficients as the coded image data.

Claim 27 (new): The method of claim 26, wherein the number of iterations until convergence is further divided by three.

Claim 28 (new): A method of representing image information as a combination of locally supported wavelets, comprising:

coding the information by wavelet decomposition,

canceling a selected wavelet coefficient,

generating reconstructed image information for the foreground image area and the background image area from the remaining wavelets,

correcting the reconstructed image information in the foreground image area, and

coding the corrected reconstructed image information by wavelet decomposition.